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10/715,861	11/19/2003	Otto Gosweiler	010564/00081	5610
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/715,861

Applicant(s)

GOSWEILER, OTTO

Examiner

NIHIR PATEL

Art Unit

3772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Argument filed on August 3rd, 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40 is/are allowed.
- 6) ☒ Claim(s) 1-13, 26-37, 39, 41 and 42 is/are rejected.
- 7) ☒ Claim(s) 14-25 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on August 3rd, 2009, with respect to claims 1-42 have been fully considered and are persuasive. The previous rejection(s) of the office action dated February 4th, 2009 has been withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1-10, 39 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Delache et al. (US 6,644,310).
4. As to claim 1, Delache teaches an apparatus that comprises a gas mask 14 (see fig. 1; col. 4 lines 30-35) having a filter port used to provide filtered air (see col. 14 lines 5-10); a blower 22 (see col. 4 lines 45-50) operatively connected to the filter port of the gas mask (see fig. 1; col. 14 lines 5-10), the blower being capable of forcing air to the gas mask (see fig. 1); and a detection 46 and control device 24 operatively connected to the blower which detects a pressure condition within the gas mask and controls operation of the blower (see fig. 1; col. 4 lines 60-67).
5. As to claim 2, Delache teaches an apparatus wherein an internal motor operates the blower (see fig. 1; col. 4 lines 45-50).

6. **As to claim 3**, Delache teaches an apparatus wherein the motor of the blower is driven by a power source (see fig. 1; col. 4 lines 50-55).
7. **As to claim 4**, Delache teaches an apparatus wherein the power source 26 is portable (see fig. 1; battery 26 can be defined as portable).
8. **As to claim 5**, Delache teaches an apparatus wherein the power source is one selected from a group consisting of a battery, a solar power pack, and an electrochemical reaction pack (see fig. 1; battery 26 can be defined as portable).
9. **As to claim 6**, Delache teaches an apparatus wherein the power source is connected to a processor (see fig. 1; the figure shows that the processor 32 cannot be turned on until the power source is either plugged in to an outlet (AC Power Main) or operated by a fully charged battery (DC Power) indicating that inherently the power source is connected to a processor).
10. **As to claim 7**, Delache teaches an apparatus wherein the power source is connected to the processor via a conductive element (see col. 4 lines 50-56).
11. **As to claim 8**, Delache teaches an apparatus wherein the power source and the processor are integrated to form a single unit (see fig. 1; the fact that the processor cannot be turned on without the power supply implies that the power source and the processor are integrated to form a single unit).
12. **As to claim 9**, Delache teaches an apparatus wherein the processor and the blower are connected by a coupling (see fig. 1; col. 4 lines 50-55).
13. **As to claim 10**, Delache teaches an apparatus that further comprises a manually adjustable control functionally connected to the processor; wherein the manually adjustable

control transmits operational signals to the blower to supplement signals transmitted to the blower by the processor (see **col. 14 lines 13-16; the fact that the gas flow generator includes a display 42 and controls 44 allowing an operator to monitor conditions and settings of the apparatus including, for example, outlet pressure, excess leak, tidal volume, and peak flow implies that a manually adjustable control functionally connected to the processor; wherein the manually adjustable control transmits operational signals to the blower to supplement signals transmitted to the blower by the processor**)

14. **As to claim 39**, Delache teaches an apparatus wherein a filter is located at an intake portion of the blower (see **fig. 1; col. 14 lines 5-10**)

15. **As to claim 42**, Delache teaches an apparatus that comprises a gas mask **14** (see **fig. 1; col. 4 lines 30-35**) having a filter port used to provide filtered air (see **col. 14 lines 5-10**); blower **22** (see **col. 4 lines 45-50**) means for blowing air to the mask (see **fig. 1**); power means **26** for providing power to said blower means (see **fig. 1; col. 4 lines 50-55**); detection means **46** for detecting a pressure condition in the mask (**col. 4 lines 60-65**) and sending a signal containing pressure condition information to control said blower means (see **col. 4 lines 60-67**); and processing means **24** for processing the pressure condition information signal and transmitting the pressure condition information signal to said blower means (see **col. 4 lines 60-67**), wherein the pressure condition information signal instructs termination of the operation of said blower means for blowing when the air pressure in the mask is at a high level and the pressure condition information signal instructs activation of the operation of said blower means for blowing when the air pressure in the mask is at a low level (see **col. 5 lines 1-30**).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. Claims **11, 12 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Delache et al. (US 6,644,310) in view of Piorkowski et al. (US 4,676,236).

19. **As to claim 11**, Delache substantially discloses the claimed invention; see rejection of claim 1 above, but does not disclose an outflow valve integrated with the mask which releases air within the mask when the outflow valve is in an open position and retains air within the mask when the outflow valve is in a closed position. Piorkowski discloses an apparatus that does provide disclose an outflow valve integrated with the mask which releases air within the mask when the outflow valve is in an open position and retains air within the mask when the outflow valve is in a closed position (see **col. 4 lines 5-25**). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Delache's invention by providing an outflow valve integrated with the mask which releases air within the mask when

the outflow valve is in an open position and retains air within the mask when the outflow valve is in a closed position as taught by Piorkowski in order to prevent the backflow of air during exhalation and prevent loss of air to atmosphere during inhalation.

19. Claims **26-37 and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Delache et al. (US 6,644,310) in view of O'Connor et al. (US 2004/0118403).

20. **As to claim 26**, Delache substantially discloses a pressure sensor **46** that detects air pressure in the mask (**see col. 4 lines 60-67**) however does not teach the pressure sensor being located within the mask. O'Connor discloses the pressure sensor being mounted on the patient interface (**see page 5 paragraph [00556]; it would only be obvious to one having ordinary skill in the art to place the pressure sensor within the mask in order to obtain the correct amount of pressure the patient is breathing in so that you can control the amount of air/gas being delivered**). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Delache's invention by placing the pressure sensing device within the mask as taught by O'Connor so that the patient gets the correct amount of air/gas for every breath.

21. **As to claim 27**, Delache substantially discloses wherein the pressure sensor detects an absolute air pressure inside the mask (**see col. 4 lines 60-67**).

22. **As to claim 28**, Delache substantially discloses the pressure sensor detects an air pressure inside the mask relative to an air pressure of ambient air outside the mask (**see col. 4 lines 60-67**).

23. **As to claim 29**, Delache substantially discloses a vent to ambient air, which is integrated with the pressure sensor on the mask and is positioned to sense ambient air pressure (see col. 4 lines 60-67; since the device of Dalache discloses an atmospheric pressure sensor 50 it would be obvious that the device contain a vent to ambient air to get the reading).

24. **As to claim 30**, Delache substantially discloses an apparatus wherein pressure sensor 46 is connected to the processor 24, wherein the processor is connected to the power source 26, and wherein the power source is connected to the blower 22 (see fig. 1; col. 4 lines 55-67).

25. **As to claim 31**, Delache substantially discloses an apparatus wherein the pressure sensor detects air pressure in the mask at a high level, and wherein the pressure sensor transmits a signal to the processor to reduce air flow upon detecting the high level of air pressure (see col. 4 lines 60-67).

25. **As to claim 32**, Delache substantially discloses an apparatus wherein the processor 24 transmits a signal to the power source to reduce an output of power and to reduce air flow from the blower 22 upon detecting the high level of air pressure (see fig. 1; col. 4 lines 60-67).

26. **As to claim 33**, Delache substantially discloses an apparatus wherein the pressure sensor 46 detects air pressure in the mask 14 at a high level, and wherein the pressure sensor transmitting a signal to the processor to terminate air flow from the blower 22 upon detecting the high level of air pressure (see fig. 1; col. 4 lines 60-67 and col. 5 lines 1-25).

27. **As to claim 34**, Delache substantially discloses an apparatus wherein the processor 24 transmits a signal to the power source to terminate an output of power and to terminate air flow from the blower upon detecting the high level of air pressure (see fig. 1; col. 4 lines 60-67 and col. 5 lines 1-25).

28. **As to claim 35**, Delache substantially discloses an apparatus wherein the pressure sensor **46** detects air pressure in the mask **14** at a low level, and wherein the pressure sensor transmits a signal to the processor to increase air flow upon detecting the low level of air pressure (see fig. **1**; col. 4 lines 60-67 and col. 5 lines 1-25).

29. **As to claim 36**, Delache substantially discloses an apparatus wherein the pressure sensor **46** detects air pressure in the mask **14** at a low level, and wherein the pressure sensor transmits a signal to the processor to activate the blower upon detecting the low level of air pressure (see fig. **1**; col. 4 lines 60-67 and col. 5 lines 1-25).

30. **As to claim 37**, Delache substantially discloses an apparatus wherein the processor **24** processes the signal transmitted by the pressure sensor **46** and transmits a readable signal to the power source to activate the blower **22** upon detecting the low level of air pressure (see fig. **1**; col. 4 lines 60-67 and col. 5 lines 1-25).

31. **As to claim 41**, Delache substantially discloses an apparatus that comprises a gas mask **14** (see fig. **1**; col. 4 lines 30-35) having a filter port used to provide filtered air (see col. 14 lines 5-10); a blower **22** operatively connected to the filter port of the gas mask (see fig. **1**; col. 14 lines 5-10), the blower being capable of forcing air to the gas mask (see fig. **1**), wherein the blower is operated by a motor driven by a portable energy source **26** (see fig. **1**; col. 4 lines 50-55); an pressure sensor **46** operatively connected to the blower **22**, wherein the pressure sensor detects an air pressure in the mask and controls an operation of the blower (see col. 4 lines 60-67); and a processor **24** connected to the pressure sensor **46** via a first conductive element and connected to the power source via a second conductive element, wherein the processor receives a signal from the pressure sensor to terminate the operation of the blower when the air pressure in

the mask is at a high level and receives a signal from the pressure sensor to activate the operation of the blower air flow when the air pressure in the mask is at a low level (see col. 4 lines 60-67 and col. 5 lines 1-25) but does not disclose the pressure sensor disposed in the mask. O'Connor discloses the pressure sensor being mounted on the patient interface (see page 5 paragraph [00556]; it would only be obvious to one having ordinary skill in the art to place the pressure sensor within the mask in order to obtain the correct amount of pressure the patient is breathing in so that you can control the amount of air/gas being delivered). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Delache's invention by placing the pressure sensing device within the mask as taught by O'Connor so that the patient gets the correct amount of air/gas for every breath.

Allowable Subject Matter

32. Claim 40 is allowed. The prior art does not teach an optoelectric device disposed in the mask at a location suitable for detecting the open position or closed position of the outflow valve and operatively connected to the blower, wherein the optoelectric detects a pressure condition within the gas mask and controls an operation of the blower.

33. Claims 14-25 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach an optoelectric device is positioned in the mask at a location suitable for detecting the open or closed position of an outflow valve linked to the gas mask, wherein the optoelectric device and the pressure sensor

work cooperatively.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIHIR PATEL whose telephone number is (571)272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nihir Patel/
Examiner, Art Unit 3772

/Patricia Bianco/

Supervisory Patent Examiner, Art Unit 3772

